REMARKS

By this Amendment, Applicant proposes to amend claims 1 and 24 to more appropriately define the invention. Claims 1-31 are pending.

In the final Office Action, the Examiner rejected claims 1-7, 9, and 11-12 under 35 U.S.C. § 102(b) as anticipated by Gardner et al. (U.S. Patent No. 5,780,340); rejected claims 24-29 under 35 U.S.C. § 102(b) as anticipated by Sugawara et al. (U.S. Patent No. 6,171,916); rejected claims 8 and 10 under 35 U.S.C. § 103(a) as unpatentable over Gardner et al. in view of *Stanley Wolf and Richard N. Tauber, Silicon Processing for the VLSI Era*, Vol. I, Lattice Press, 1986, pp. 551-555 ("Wolf"); and rejected claims 30 and 31 under 35 U.S.C. § 103(a) as unpatentable over Sugawara et al. Claims 13-23 were allowed.

Applicant appreciates the indication of allowable subject matter, but respectfully traverses the claim rejections under 35 U.S.C. §§ 102(b) and 103(a).

In order to properly anticipate Applicant's claimed invention under 35 U.S.C. § 102, each and every element of the claim in issue must be found, "either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." See M.P.E.P. § 2131, 8th ed., Rev. of May 2004.

Applicant respectfully requests the withdrawal of the rejection of claims 1-7, 9, and 11-12 under 35 U.S.C. § 102(b) as anticipated by Gardner et al., because Gardner et al. does not teach each and every element of these claims.

Independent claim 1 as Applicant proposes to amend it recites a method for fabricating a semiconductor transistor that includes, inter alia, "forming an LDD region using ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region."

The Examiner considered Gardner et al.'s localized source/drain regions 162A and 162B as corresponding to Applicant's claimed LDD region and Gardner et al.'s openings 112 and 114 as corresponding to Applicant's claimed trench. Office Action, pp. 2-3; see also Gardner et al., col. 4, ll. 12-14, and col. 7, ll. 6-8. However, Gardner et al.'s openings 112 and 114 are formed before localized source/drain regions 162A and 162B are formed. See Gardner et al., col. 4, ll. 12-14, col. 7, ll. 6-8, and Figs. 1C-1O. Therefore, Gardner et al. fails to teach at least "forming an LDD region using ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region," as recited in claim 1.

Thus, claim 1 is allowable over Gardner et al. Claims 2-7, 9, and 11-12 depend from claim 1 and are also allowable at least because of their dependence from an allowable base claim.

Applicant also respectfully requests the withdrawal of the rejection of claims 24-29 under 35 U.S.C. § 102(b) as anticipated by Sugawara et al., because Sugawara et al. does not teach each and every element of these claims.

Independent claim 24 as Applicant proposes to amend it recites a method for fabricating a semiconductor transistor that includes, inter alia, "forming an LDD region using an ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region."

The Examiner considered Sugawara et al.'s shallow junction layer 7 as corresponding to Applicant's claimed LDD region and Sugawara et al.'s strip-like groove 6 as corresponding to Applicant's claimed trench. Office Action, p. 5; see also Sugawara et al., col. 4, ll. 29-37. However, as shown in Figs. 1B and 1C of Sugawara et al., strip-like groove 6 is formed before shallow junction layer 7 is formed. Sugawara et al., col. 4, ll. 29-37. Therefore, Sugawara et al. fails to teach at least "forming an LDD region using an ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region," as recited in claim 24.

Thus, claim 24 is allowable over Sugawara et al. Claims 25-29 depend from claim 24 and are also allowable over Sugawara et al. at least because of their dependence from an allowable base claim.

Additionally, Applicant respectfully requests the withdrawal of the rejection of claims 8 and 10 under 35 U.S.C. § 103(a) as unpatentable over Gardner et al. in view of Wolf for the following reasons.

To establish a prima facie case of obviousness under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. M.P.E.P. § 2143, 8th ed., Revision of May 2004.

As discussed above, Gardner et al. fails to teach or suggest at least "forming an LDD region using ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region," as recited in claim 1, from which claims 8 and 10 depend. Wolf does not cure the deficiencies of Gardner et al. Wolf only discusses dry etching techniques for VLSI fabrication of semiconductor devices. Office Action, p. 7. Wolf fails to teach or suggest at least "forming an LDD region using ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region," as recited in claim 1.

Therefore, Gardner et al. and Wolf, taken alone or in combination, fail to teach or suggest each and every element of claim 1. Claims 8 and 10, which depend from claim 1, are therefore allowable under 35 U.S.C. § 103(a).

Finally, Applicant respectfully requests the withdrawal of the rejection of claims 30 and 31 under 35 U.S.C. § 103(a) as unpatentable over Sugawara et al. As noted above, Sugawara et al. fails to teach or suggest at least "forming an LDD region using an ion implantation; . . . [and] forming a trench in the substrate after forming the LDD region," as recited in claim 24, from which claims 30 and 31 depend. Therefore, claims 30 and 31 are patentable at least because of their dependence from an allowable base claim.

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-31 in condition for allowance. Applicant submits that the proposed amendments of claims 1 and 24 do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner. Therefore, this Amendment should allow for immediate action by the Examiner.

Finally, Applicant submits that the entry of the Amendment would place the application in better form for appeal, should the Examiner continue to dispute the patentability of the pending claims.

Applicant, therefore, requests the entry of this Amendment, the Examiner's reconsideration of the application, and the timely allowance of the pending claims.

If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, and not requested by attachment, such extension is hereby requested. If there are any fees due under 37 C.F.R. § 1.16 or 1.17 that are not enclosed, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge those fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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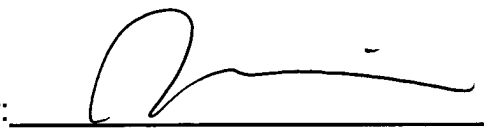
by: 

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